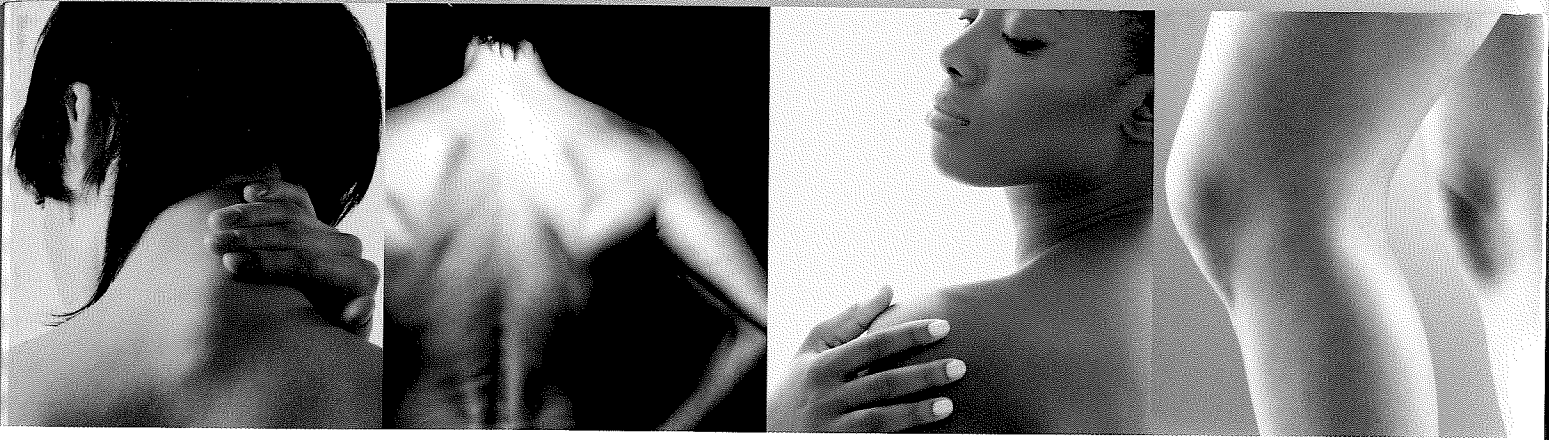


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DEFEAT CHRONIC PAIN NOW!

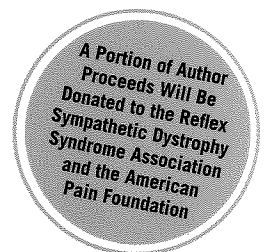
GROUNDBREAKING STRATEGIES FOR ELIMINATING THE PAIN
OF ARTHRITIS, BACK AND NECK CONDITIONS, MIGRAINES,
DIABETIC NEUROPATHY, AND CHRONIC ILLNESS

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Alert! "Muscle Relaxants" Are Really Sedatives/Hypnotics

Note that we have put quotes around the term "muscle relaxants" because the drugs do not act directly on the muscle, but rather on the brain, much like the sedative/hypnotic drugs. They relax muscles by causing you to relax and feel tired. In fact, "muscle relaxants" are truly sedative/hypnotic drugs. Like those drugs, "muscle relaxant" medications do not produce pain relief in chronic pain states, and often cause both acute and chronic side effects. **"Muscle relaxants" are generally bad medications for chronic pain.**

MUSCLE RELAXANTS ARE OKAY FOR ACUTE PAIN

Muscle relaxants are sometimes used to treat acute pain conditions, such as muscle problems associated with acute back pain. However, for a number of reasons, including their relatively poor pain-relieving capabilities and their potential side effects, these drugs are not typically recommended for chronic pain.

TYPES OF MUSCLE RELAXANTS (BRAND NAME)

- Carisprodol (Soma)
- Baclofen (Lioresal)
- Cyclobenzaprine (Flexeril)
- Dantrolene (Dantrium)
- Metaxalone (Skelaxin)
- Methocarbamol (Robaxin)
- Orphenadrine (Norflex)

Opioids' ("Narcotics") Historic Role

Opioid drugs are some of the oldest painkillers known to man. They have been used for thousands of years to treat all types of pain. Throughout time, and still today, no pain medication has had more controversy surrounding it than opioid drugs. It seems as though every decade there is a dramatic shift in medical wisdom as to what role these medications should play in the treatment of pain, especially chronic pain. In our medical careers, we have seen them play the role of both villain and superhero. In reality, they are more often the superhero than the villain, if prescribed appropriately to the right patient.

Besides being the drugs of choice for the treatment of acute moderate to severe pain from surgery or injury and for most types of cancer pain, opioid medication may also significantly relieve many patients' chronic pain. Over the past decade, lots of good scientific studies have shown that long-acting opioids can reduce the pain in some patients with low back pain, neuropathic pain, and arthritis pain.

Therefore, based on these studies and the experience of pain experts (like us), the vast majority of pain doctors feel that some patients with chronic pain can obtain significant pain relief from opioid medication, as long as they are prescribed and monitored properly (see "Who Is Appropriate for Opioid Medication?").

NAMES OF OPIOID DRUGS

Opioids can be divided into two groups, based on how long their action lasts in the body: short-acting opioids and long-acting opioids.

Short-Acting Opioid Drugs

- Tramadol (Ultram)
- Tramadol + acetaminophen (Ultracet)
- Codeine
- Oxycodone
- Oxycodone + acetaminophen (Percocet)
- Oxycodone + aspirin (Percodan)
- Hydrocodone + acetaminophen (Vicodin, Lortab)
- Morphine
- Meperidine (Demerol)
- Hydromorphone (Dilaudid)
- Oxymorphone IR (Opana IR)
- Transmucosal Fentanyl (Actiq, Fentora, Onsolis)
- Levorphanol

Long-Acting Opioid Drugs

- Tramadol ER (Ultram ER, Ryzolt)
- Long-acting morphine (MS Contin, Morphine ER, Embeda Kadian, Avinza)
- Methadone
- Long-acting hydromorphone (Exalgo)
- Long-acting oxycodone (Oxycontin, Oxycodone ER)
- Oxymorphone ER (Opana ER)
- Transdermal fentanyl patch (Duragesic)
- Levorphanol

OPIOID MEDICATION SIDE EFFECTS**Acute side effects**

- Gastrointestinal issues (nausea, vomiting)
- Constipation
- Itchiness
- Cognitive problems (memory, concentration)

Chronic side effects

Although all of the following have been associated with long-term opioid use, not every patient will experience these side effects, and some may lessen with time:

- Constipation
- Sedation
- Irritability
- Cognitive problems (memory and concentration problems)
- Hypogonadism (decreased libido, irregular menstrual cycle, impotence)
- Rebound headaches

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Help Stop Opioid Abuse

With the increased use of opioid medication to treat pain comes a societal cost. Specifically, some people take these drugs not to treat pain, but for their euphoric qualities. (Note that most pain patients do not experience euphoria from these drugs, but only find relief from the pain.) Taking opioid medication for euphoria can be very dangerous, if not fatal. When people overdose on these drugs—which is especially easy if they bite, chew, inject, or snort the long-acting opioids, such as Oxycontin, Opana ER, or Morphine ER—they can get a huge dose of the drug, causing them to stop breathing.

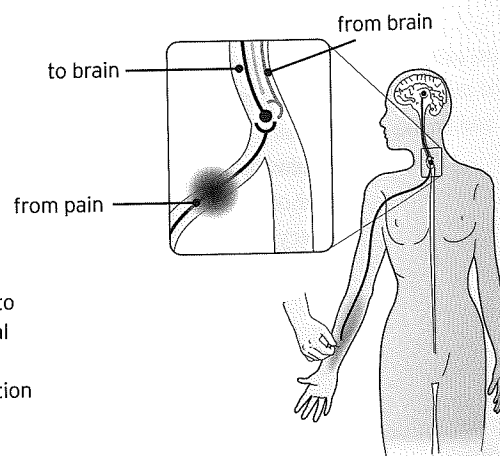
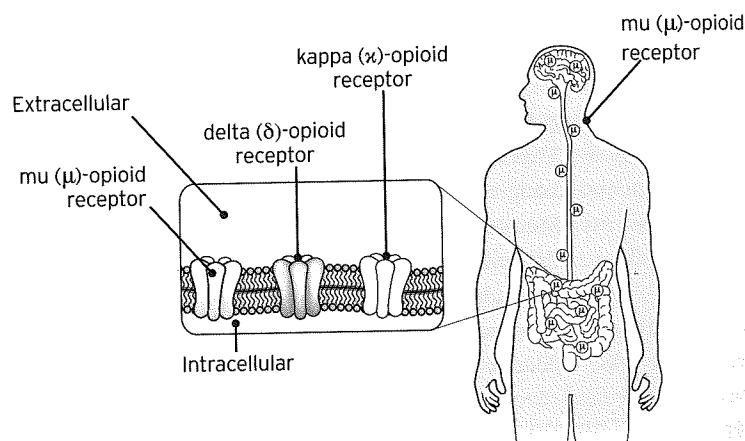
Studies have shown that the most common way nonpain persons get opioid pain medication is from a friend's or relative's medicine cabinet. Thus, one important way to stop the flow of opioid medication into society is to have a lock on your opioid medication and to dump it once you no longer need it. For the sake of the environment, please don't flush the pills down the toilet, but rather mix them with coffee grounds or cat litter and dispose of them in the garbage.

(continued)

WHO IS APPROPRIATE FOR OPIOID MEDICATION?

It is currently recommended that every chronic pain patient suffering from moderate to severe pain be viewed as a potential candidate for opioid therapy. The only issue concerns when the patient should be prescribed an opioid. Like most pain treatment experts today, we believe chronic opioid therapy should not be a first-line treatment and should be tried only after other nonopioid medications have been tried and have failed.

As opposed to old medical myths, some chronic pain patients with back pain, neuropathic pain, and OA pain find that opioid drugs actually provide the best balance of pain relief and side effects. In fact, opioids in some ways are safer for elderly patients than many other pain drugs, such as TCAs and antiseizure drugs.



▲ How opioids work. By binding to opioid receptors in the brain, spinal cord, and peripheral nerves, they alter the nervous system's perception of pain. They also work in the gut, causing constipation.

Frequently Asked Questions About Opioids

HOW DO OPIOIDS WORK?

All animals, humans included, have natural chemicals (neurotransmitters) called *endorphins* and *enkephalins* in our brain and spinal cord, where they play a vital role in reducing pain. More recently, these natural chemicals have also been found in our peripheral nerves and joints, where it is thought that they also work to reduce pain.

Opioid medications act just like our natural opioid-like neurotransmitters. They work in the same places as do our body's natural opiate chemicals, the endorphins and enkephalins, within our spinal cord, brain, peripheral nerves, and joints, to help alleviate pain.

WHERE DO OPIOID DRUGS COME FROM?

There are several different types of opioid drugs:

- Natural opiates come from opium poppy resin and include morphine and codeine.
- Semisynthetic opioids are made using natural opiates and include hydromorphone, hydrocodone, oxycodone, and oxymorphone.
- Fully synthetic (man-made) opioids include fentanyl, methadone, and tramadol.
- Endogenous opioid chemicals are produced naturally in the body and include endorphins, enkephalins, dynorphins, and endomorphins.

DO OPIOIDS CAUSE ADDICTION IN CHRONIC PAIN PATIENTS?

First, we need to define what addiction is and is not. So many people confuse addiction with another biologic process, physical dependence. We're sure you have read the newspapers and seen on TV the accounts of people claiming to have become addicted to Oxycontin. Absolutely this is a major societal issue that needs to be dealt with. However, in our opinion, many of these folks on TV appeared not to be addicted, but rather had developed a physical dependence, which is a normal bodily reaction that happens with lots of different types of medication, including medications not used for pain, and is easily remedied.

(Help Stop Opioid Abuse continued)

FDA Steps In Because of all the issues with the abuse of opioid medication, the FDA has very appropriately instituted measures drug companies need to take while they are marketing these medications. The FDA has now required makers of opioid medications to institute risk-evaluation and mitigation strategies (REMS) to address the issues of abuse and misuse of these medications. Also, at the time of this writing, the FDA is contemplating a required learning course for all doctors who prescribe opioid medications and patients who take them, which we believe is a good idea.

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What's New: Opioids that May Deter Abuse

Due to the societal issue of misuse of opioid drugs, drug companies have developed special formulations of their extended-release opioids that may make misuse less likely, and if abused, may less likely result in death.

How do these work? One drug recently approved by the FDA, Embeda, combines extended-release morphine with the anti-opioid naltrexone. Embeda results in the same amount of pain relief as morphine, but if the capsule is tampered with, naltrexone is released and works against the morphine, preventing death from respiratory depression.

Multiple other abuse-deterrent opioids are being developed with various other technologies, including pills that cannot be crushed.

Physical dependence is a natural occurrence that happens to everyone who takes certain drugs for a long period of time. Your body gets used to having the drug, so when you stop taking it, you will develop a negative withdrawal reaction. This happens not just with opioids, but also with nicotine, caffeine, alcohol, sedatives/hypnotics (e.g., Valium), antidepressants, blood pressure drugs, and steroids. Going into withdrawal after suddenly stopping an opioid does not mean you are addicted. Opioids, even if taken chronically, can be safely and comfortably stopped by gradually reducing the dosage, usually by 10 percent every five to seven days.

By definition, addiction is a psychological craving for a drug, and is apparent when a person takes an opioid for reasons other than pain relief. The addict lives every minute of the day thinking about how he or she will get his or her next dose of that drug. When chronic pain patients take opioids to treat their pain, they rarely develop a true addiction and drug craving. However, a risk factor for developing a true addiction to opioid medications, even if you are taking them for pain, is a history of a prior addiction, such as to alcohol or other drugs.

Pseudoaddiction Because of a Low Dose

Sometimes chronic pain patients may develop something called *pseudoaddiction*, which is caused by their doctor not appropriately prescribing the opioid medication. Pseudoaddiction happens when a patient's opioid medication is not being prescribed in doses strong enough to provide good pain relief, or the drug is not being prescribed often enough throughout the day. If this is the case, because the pain patient is still experiencing pain, he or she begins to take more doses than were prescribed to achieve good pain relief (and not for the high). Although this is a serious no-no, it is not a true addiction because the patient is not taking extra doses of the opioid medication to maintain a high, but rather is taking the extra pills to relieve pain. When a pseudoaddicted patient is prescribed the proper amount of opioid medication, he or she doesn't take any extra pills, because his or her pain is relieved.

Tolerance Is a Natural Reaction

Some pain patients (and even some of their doctors) mistakenly feel they are addicted because over time they need to take increasingly larger doses of the same opioid medication to experience the same amount of pain relief. This is called

Understanding Medications for Pain

tolerance. Tolerance is a natural physical reaction and is not addiction. To be tolerant to opioids, a patient must first have demonstrated significant pain relief at a certain dose which remains stable for at least a month.

Also, in our experience, the issue of tolerance is overblown. Only a minority of chronic pain patients who are taking long-term opioids develop tolerance.

Physical Dependence

Physical dependence is not addiction! Lots of other non-narcotic drugs also produce a physical dependence, such as steroids, blood pressure medicine, and anti-depressants. Physical dependence is another naturally occurring physical reaction that happens in everyone! All patients can safely be taken off opioid medication if the dose is slowly tapered down by their doctor.

The bottom line: Only rarely does opioid medication cause a true addiction when prescribed appropriately to a chronic pain patient who does not have a prior history of addiction.

HOW SHOULD OPIOID MEDICATION BE PRESCRIBED?

When using an opioid as one of the main treatments for chronic pain, long-acting opioid formulations are better than short-acting ones. Long-acting opioid medications should be prescribed around the clock, meaning that you take them at certain times on the clock (usually twice per day or once per day) and not based on how much pain you are feeling. This around-the-clock dosing results in a steady, constant amount of the drug in your blood, and therefore keeps you consistently more comfortable throughout the full twenty-four-hour cycle.

CONCLUSION: FIND THE DRUG THAT WORKS FOR YOU

As you have seen, you have an almost overwhelming number of medication options to consider when working with a doctor to treat your chronic pain. The appropriate choice will depend on your specific condition, the severity of the drug's side effects, and simply, what works best for you. In finding the ideal drug or drugs, it is important to remember to be patient and persistent. If the first one does not succeed, try and try again. It is critical for you to find a doctor who is familiar with how to prescribe all of these medications, and one who, like you, won't give up trying!

Q & A with
Dr. Argoff and Dr. Galer

I have nerve pain in my feet from diabetes. The doctor says there's not much to try except Percocet or Vicodin. Is this true?

No. While opioid narcotic medication, such as the oxycodone in Percocet and the hydrocodone in Vicodin, can alleviate all types of nerve pains, they are not the only medications that can treat neuropathic (nerve) pain and also likely shouldn't be the first medication to try most of the time. Nerve pains, whether from diabetes, shingles, or other types of nerve injury, can be successfully treated with many different types of drugs. While the FDA has approved only several medications to treat pain from diabetic neuropathy, including Pregabalin (Lyrica) and Duoxetine (Cymbalta), other drugs have been approved by FDA to treat Postherpetic Neuralgia, such as Lidocaine Patch (Lidoderm) and Gabapentin (Neurontin). Most pain experts agree that if a drug has been shown to treat one type of nerve pain problem it most likely can also help alleviate other kinds of nerve injury pains.

My doctor has kept me on the same medications to treat my pain for three years. I am not sure if they're helping me anymore. What should I do?

First, remember all medication changes must be reviewed with your doctor and she or he has to agree to such changes and monitor every change.

This is a very good question that many patients have or should be asking themselves. Any medications you take (whether for pain or any other condition) should

only be taken if it is helping and not hurting you. For pain, that usually means that it is providing at least 30% pain relief and has no bad side effects. However, sometimes patients after a while aren't sure if the medication is working. The best way to tell is to see what happens as you slowly decrease the dose—does the pain get worse? Again, this must be done under your doctor's supervision. The good news is that if your current treatment is not helping you as much as in the past, it is likely that your doctor can consider a newer regimen that may be more helpful.

I am a 35-year-old with chronic back pain. Nothing has seemed to work, even two surgeries, nerve blocks, physical therapy, acupuncture and an electrical stimulator. I take Vicodin every once in a while and it really helps without any bad side effects. My doctor wants to put me on a strong opioid narcotic that I take every day, twice per day. I am afraid I'll become addicted, but the pain is just getting intolerable. What should I do?

Here are the facts. It is very uncommon for a person with chronic pain to become "addicted" to narcotics if (1) he doesn't have a prior history of any addiction and (2) he only takes the medication to treat pain. Studies have shown that many chronic pain patients can experience significant pain relief with tolerable side effects from opioid narcotic medication when taken daily and no addiction. We definitely would try this type of treatment for our patients in your situation.